

AMENDMENTS TO THE SPECIFICATION:

Please replace the 1st paragraph of page 1, as amended by the Preliminary Amendment filed on February 17, 2004, with the following rewritten paragraph:

Related Applications:

This application is a continuation of U.S.S.N. 09/715,838, filed on November 17, 2000, now U.S. Pat. No. 6,846,907, which is a continuation-in-part of PCT application PCT/CA99/00516, filed on May 19, 1999, which claims priority to Canadian application 2,237,915, filed on May 19, 1998; the specifications of which are incorporated by reference herein.

Please replace the paragraph bridging pages 11 and 12 with the following rewritten paragraph:

Additionally, SEQ. ID. NO. 6 depicts the amino acid sequence of an IL-11 binding region identified within the human IL-11R, namely: Ser Ile Leu Arg Pro Asp Pro Pro Gln Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro (SEQ ID NO: 6). The corresponding murine sequence is depicted in SEQ. ID. NO. 8 and is: Ser Ile Leu Arg Pro Asp Pro Pro Gin Gly Leu Arg Val Glu Ser Val Pro Ser Tyr Pro (SEQ ID NO: 8). These sequences differ in their eighteenth amino acid whereby the human peptide has Gly and the murine sequence has Ser. Gly and Ser are both relatively small amino acid residues, having volumes of 60.1 and 89.0 Å³ respectively, and accessible surface areas of 75 and 115 Å² respectively. This suggests that the relatively small size of amino acid 18 in this peptide facilitates interactions with IL-11. However, Gly and Ser differ in their hydrophilicity, suggesting that several factors may interact to govern the suitability of particular amino acid substitutions at position 18 in these peptides. Thus, although IL-11 binding peptides exist which have the amino acid sequence: Ser Ile Leu Arg Pro Asp Pro Pro Gln Gly Leu Arg Val Glu Ser Val Pro xxx Tyr Pro, where xxx is a suitable amino acid (SEQ ID NO: 9), it will be necessary to screen potential IL-11 binding peptides having this sequence using the TRAP assay and/or the bone nodule formation assay in order to determine if they are IL-11 binding peptides.

Please replace the 2nd full paragraph of page 16 with the following rewritten paragraph:

In another illustrative embodiment, the peptidomimetic can be derived as a retro-enatio analog of the peptide, such as the exemplary retro-enatio peptide analog derived for the illustrative Arg Arg Leu Arg Ala Ser Trp peptide (SEQ ID NO: 5):

Please replace the 3rd full paragraph of page 38 with the following rewritten paragraph:

Peptide 1 inhibits IL-11 induced osteoclast formation, whereas peptide 2 does not. The results of this experiment pertaining to peptide 1 are depicted in Figure 8. This indicates that a peptide sequence comprising Arg Arg Leu Arg Ala Ser Trp (SEQ ID NO: 5) is capable of interacting with IL-11 and acting as an antagonist to IL-11 mediated activation of the osteoclast formation. The ability of peptide 1, and particularly the peptide sequence Arg Arg Leu Arg Ala Ser Trp (SEQ ID NO: 5) to inhibit osteoclast formation indicates that this peptide is interacting with IL-11. Thus, peptide 1 is an example of an IL-11 binding peptide.

Please replace the 4th full paragraph of page 38 with the following rewritten paragraph:

Figure 12 shows the ability of the peptide Ser lie Leu Arg Pro Asp Pro Pro Gin Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro (SEQ ID NO: 6) to IL-11 induced osteoclast formation.